

REMARKS

Claims 1-28 are pending in the application. Claims 1, 10 and 22 are herein amended.

Claims 21, 27-28 were rejected under 35 U.S.C. 102(b). Claims 1 and 10-12 were rejected under 35 U.S.C. 103(a). Claims 22-26 were rejected under 35 U.S.C. 112, second paragraph. Claims 2-9 and 13-20 were objected to as being dependent upon a rejected base claim, but were otherwise stated to be allowable. Applicant respectfully thanks the Examiner for consideration of these claims. Reconsideration of the present case is earnestly requested in light of the following remarks.

§112 Rejections

Claims 22-26 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Therefore, Applicant has amended claim 22. Accordingly, Applicant respectfully submits that claim 22 and those dependent thereon are allowable.

§102 Rejections

Claims 21, and 27-28 were rejected under 35 U.S.C. 102(b) as being anticipated by Seiler et al. (U.S. Patent No. 4,929,889, hereinafter "Seiler"). This rejection is respectfully traversed.

The Examiner states in the Office Action: "As per claim 21, Seiler et al disclosed the invention claimed, including a method of performing signature analysis: a requesting device requesting data; a providing device data in response to said requesting [sic]; wherein the data comprises requested data and unrequested data (col. 2, lines 55-59; col. 6, lines 24-28); replacing the unrequested data with predictable data, wherein the predictable data has a predictable value; and a signature analysis device register in the requesting device capturing the predictable data and the requested data (col. 2, lines 40-45; col. 6, lines 33-50)." Applicant respectfully disagrees with Examiner.

As Examiner is certainly aware “[a]n ‘anticipating’ reference must describe all of the elements and limitations of the claim in a single reference, and enable one of skill in the field of the invention to make and use the claimed invention. *Bristol-Myers Squibb Co. v. Ben Venue Labs., Inc.*, 246 F.3d 1368, 1378-79 (Fed. Cir. 2001); *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226 (Fed. Cir. 1989).” *In re Merck & Co., Inc. v. Teva Pharm. USA, Inc.*, 347 F.3d 1367, 1372 (Fed. Cir. 2003).

Seiler teaches and discloses that signature analyzer 198 includes a 16-bit linear shift feedback register (LSFR) 202. Moreover, Seiler teaches and discloses that a signature is computed by LSFR 202. “At the end of the test sequence, the computed signature in the LSFR 202 can either be shifted out on the test output pin 204, or can be compared to a previously specified test result which has been loaded into expected signature register 208, with only pass/fail indication being output” (Seiler col 6, lines 52-57) (*emphasis added*). The LSFR 202 of signal analyzer 198 computes signatures on all the data that it receives, and LSFR 202 does not make any distinction between requested data and unrequested data. In fact, Seiler nowhere teaches or suggests making a distinction between requested data and unrequested data.

In contrast, Applicant’s invention as recited in pertinent part by claim 21 includes “. . . replacing the unrequested data with predictable data, wherein the predictable data has a predictable value; and a signature analysis register in the requesting device capturing the predictable data and the requested data.” Seiler does not teach, suggest, or provide motivation for these features.

Therefore, Applicant respectfully submits that claim 21 is patentably distinct over Seiler. Accordingly, Applicant respectfully submits that, at least for the reason or reasons presented, claim 21 and those dependent thereon are allowable.

§103 Rejections

Claims 1 and 10-12 were rejected under 35 U.S.C. 103(a) as being unpatentable over Seiler in view of Fruehling et al. (U.S. Patent No. 6,625,688, hereinafter "Fruehling"). This rejection is respectfully traversed.

The Examiner states in the Office Action: ". . .but Seiler et al did disclose. . .a control register providing means for specifying the set of test points to be tested (col. 10, lines 33-35)" (*emphasis added*).

Seiler discloses: ". . .a. a clocked integrated circuit having registers, at least one of the registers comprising a control register, the control register providing means for specifying the set of test points to be tested; . . ." (Seiler col 10, lines 32-35) (*emphasis added*). Seiler further discloses: ". . .e. a linear feedback shift register, the linear feedback shift register having an output, the linear feedback shift register being coupled to the common load/test bus for computing a signature corresponding to the values of the test points; . . ." (*emphasis added*). Therefore, Applicant respectfully submits that Seiler computes a signature corresponding to the values of the test points. Even if, for the sake of argument, the values of the test points were assumed to be requested data, then Seiler would compute a signature corresponding to the requested data and not corresponding to any predictable data.

In contrast, Applicant's invention currently recited in pertinent part by claim 1 includes ". . .wherein the controller is configured to receive the data output by the first component in response to the second component's request, wherein the controller is configured to replace the unrequested data with predictable data and to output the predictable data and the requested data, wherein the signature analysis register is configured to capture the predictable data and the requested data." Seiler does not teach, suggest, or provide motivation for these features.

Fruehling teaches and discloses producing a signature from requested data: "A controller is coupled to the register for controlling reading of the memory. The register generates a signature in response to the memory. The controller compares the reference signature and the second signature" (Fruehling col 5, lines 44-48) (*emphasis added*).

In contradistinction, as above, Applicant's invention currently recited in pertinent part by claim 1 includes ". . . wherein the controller is configured to receive the data output by the first component in response to the second component's request, wherein the controller is configured to replace the unrequested data with predictable data and to output the predictable data and the requested data, wherein the signature analysis register is configured to capture the predictable data and the requested data." Fruehling does not teach, suggest, or provide motivation for these features.

Therefore, Applicant respectfully submits that, at least for the reason or reasons presented, claim 1 is patentably distinguished over both Seiler and Fruehling, taken both singly and in combination. Accordingly, Applicant respectfully submits that, at least the reason or reasons presented, claim 1 and those dependent thereon are allowable.

Claim 10 includes limitations similar to claim 1, and so the arguments presented above apply with equal force to claim 10, as well. Accordingly, Applicant respectfully submits that claim 10 is patentably distinguished over both Seiler and Fruehling, taken both singly and in combination. Applicant respectfully submits that, at least the reason or reasons presented above, claim 10 and those dependent thereon are allowable.

Claim 21 includes features similar to claim 1, specifically, the features that ". . . replacing the unrequested data with predictable data, wherein the predictable data has a predictable value; and a signature analysis register in the requesting device capturing the predictable data and the requested data", and so the arguments presented above apply with equal force to claim 21, as well. Accordingly, Applicant respectfully submits that claim 21 is patentably distinguished over both Seiler and Fruehling, taken both singly and in combination. Applicant respectfully submits that, at least the reason or reasons presented above, claim 21 and those dependent thereon are allowable.

Applicant also respectfully asserts that numerous ones of the dependent claims recited further distinctions over the cited art. However, since the independent claims have been shown to be patentably distinct, a further discussion of the dependent claims is not necessary at this time.

CONCLUSION


Applicant submits the application is in condition for allowance, and an early notice to that effect is requested.

If any extensions of time (under 37 C.F.R. § 1.136) are necessary to prevent the above referenced application(s) from becoming abandoned, Applicant(s) hereby petition for such extensions. If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert & Goetzel PC Deposit Account No. 50-1505/5181-83900/JCH.

Also enclosed herewith are the following items:

- ☒ Return Receipt Postcard
- ☐ Request for Approval of Drawing Changes
- ☒ Notice of Change of Address
- ☐ Check in the amount of \$ for fees ().
- ☐ Other:

Respectfully submitted,



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